A. Nikitenko CERN EP / ITEP Moscow Milestones and on-going tasks of Physics objects subgroup

Jun '01

- □ algorithms to reduce fake jets (0.5 FTE, Andrei)
- \Box HLT \mathcal{T} 's with tracking (1FTE,Sasha)
- ☐ HF segmentation in L1 study complete (0.5 FTE, Jim Brooke)
- □ optimize hlt/offline MET measurement from calorimetry at low/higs luminosity (? + 0.2 Sasha)
- □ implementation / testing / further development of jetfinder algorithms with pile-up substruction (0.5 FTE, Irina, Hans-Peter)
- \Box update ntuple maker to include e / μ / track information (0.3 FTE)

Dec 2001 - DAQ TDR: Final HLT selection complete by Nov 1.

Nov '01.

- ☐ trigger table that gets good acceptance to tape for
 - SUSY A/H -> 2τ , τ ->hadr
 - SUSY events with jet/MET final state
 - Charged Higgs in g b -> H⁺ t -> jjbτ, τ->hadr (4.0 FTE, Sasha, Ritva)
- **MET rate study using MET with jet energy corrections (1.0 FTE)**

thinking about the best off-line reconstruction . . .

Jun'02

```
□ thorough jet reconstruction study including effects like
       particle level:
                  quark and gluon jets, b-jets
                  track multiplicity,
                  cone size effect
        reco jets:
                  E v.s. cone size,
                  magnetic field effect,
                  \eta / \phi accuracy v.s. E,
                   resolving jet overlap,
                                                     (1.0 FTE)
```

☐ JET and MET algorithms that include tracking (2.0 FTE)

Dec 2003 - Physics TDR

Nov'02 towards Physics TDR

□ intermediate results

Jun'03

- completed physics analysis on
 - SUSY A/H -> 2τ , τ ->hadr
 - SUSY events with jet/MET final state
 - Charged Higgs in g b -> H⁺ t -> jjb τ , τ ->hadr

Nov'03

Physics TDR is ready!

on-going tasks

- □ coordination and babysitting of production (1.0 FTE)
- □ production and web-based documentation of ntuples(0.2FTE, Pal?)
- □ ntuple maker maintainance (0.2 FTE, Pal?)